

# ECS4310-18T

## Gigabit Ethernet Smart Switch



### Product Overview

The Edge-Core Web smart Gigabit Ethernet Switch ECS4310-18T is a new 16 Gigabit ports smart switch with 2 SFP ports that bring the speed of Gigabit copper to the desktop with the added flexibility of fiber. ECS4310-18T enables networks of all sizes to introduce Gigabit Ethernet with management features targeted to meet the needs of the SMB network, and Gigabit to the desktop for power users. It provides a flexible Web based management interface to enable the configuration of switch features, port settings including security, QoS with 8 queues, link aggregation and VLANs. These features can increase throughput and flexibility. Security is more important in next generation networks so this switch has added security features to protect your network.

### Key Features and Benefits

#### Performance and Scalability

It's a great entry level managed with 36Gbps switching capacity delivers wire-speed switching performance to take full advantage of existing high-performance on PCs and laptops by significantly improving the responsiveness of applications and file transfer times .

The device also has two Gigabit Ethernet combo ports for uplink flexibility, allowing copper or fiber uplinks port for high speed uplinks to servers or backbones.

#### Continuous Availability

IEEE 802.1w Rapid Spanning Tree Protocol provides a loop-free network and redundant links to the core network with rapid convergence, to ensure faster recovery from failed links, enhancing overall network stability and reliability.

IEEE802.3ad Link Aggregation Control Protocol (LACP) increases bandwidth by automatically aggregating several physical links together as a logical trunk and providing load balancing and fault tolerance for uplink connections.

IGMP snooping prevents flooding of IP multicast traffic and limits bandwidth intensive video traffic to only the subscribers.

#### Comprehensive QoS

8 egress queues per port enable differentiated management of up to 8 traffic types.

Traffic is prioritized according to 802.1p and DSCP giving optimal performance to real-time applications such as voice and video.

Asymmetric bidirectional rate-limiting, per port or per traffic class, preserves network bandwidth and allowing maximum control of network resources.

#### Enhanced Security

Port Security ensures access to switch ports based on MAC address, limits the total number of devices from using a switch port and protects against MAC flooding attacks.

IEEE 802.1x port-based or MAC-based\* access control ensures all users are authorized before being granted access to the network. User authentication is carried out using any standard-based dynamic VLAN assignment with RADIUS server by guest VLAN.

EAPOL transparent\* is an alternative way to leverage the more powerful L2/L3 switch for the access authentication.

#### Simple Management

Embedded user friendly Web interface helps users quickly and simply configure switches.

It's also supports SNMP v1/v2C to be managed and control SNMP network station.

Cable diagnostics for diagnose any cable faults (Short, Open etc.) and feedback a distance to the fault.

LLDP (Link Layer Discovery Protocol) enables administrator to monitor what device is attached to the switch.



## Features

<h3>Physical Ports</h3> <p>16 10Base-T/100Base-TX/1000Base-T with auto-negotiation 2 1000Base-X SFP transceiver slots</p>	<h3>Management</h3> <p>Switch Management: WEB management SNMP v1, v2c</p> <p>Firmware &amp; Configuration: Firmware upgrade via Web Supports DHCP Client Supports DHCP snooping* Supports LLDP (802.1ab) (Optional) ECView Pro, a powerful network management software that maximizes the managed capabilities of Edge-Core devices with: Topology Management Performance Management Configuration Management Event Management SNMP Management</p>
<h3>Performance</h3> <p>Switching Capability: 36Gbps Forwarding Rate: 26.8Mpps Packet Buffer Size: 448KB MAC Address Table: 16K</p>	<h3>Mechanical</h3> <p>Dimensions (W x D x H): 172 mm x 440 mm x 43 mm ( 6.77 x 17.32 x 1.69 inches) Weight : 1.98kg (4.37lbs) LED Indicators: Port, Uplink, System, Diagnostic</p>
<h3>L2 Features</h3> <p>Auto-negotiation for port speed and duplex mode Flow Control: IEEE 802.3x for full duplex mode Back-Pressure for half duplex mode Spanning Tree Protocol: IEEE 802.1D Spanning Tree Protocol (STP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) VLANs: Supports 256 IEEE 802.1Q VLANs Port-based VLANs Private VLAN (port isolation) Link Aggregation: Static Trunk IEEE 802.3ad Link Aggregation Control Protocol Trunk groups: 8, Trunk links: 2~8 IGMP Snooping: IGMP v1/v2snooping IGMP Immediate leave Supports jumbo frames up to 9KB</p>	<h3>Safety</h3> <p>CSA (CSA 22.2 NO 60950-1 &amp; UL 60950-1) CB(IEC/EN60950-1)</p>
<h3>IPv6 Features</h3> <p>IPv4/IPv6 Dual Protocol stack IPv6 Address Types Stack: Unicast IPv6 Neighbor Discovery SNMP over IPv6 HTTP over IPv6 Remote IPv6 ping</p>	<h3>Electromagnetic Compatibility</h3> <p>CE Mark FCC Class A EN 55022 (CISRP 22) Class A EN 61000-3-2/3 VCCI*</p>
<h3>QoS Features</h3> <p>Priority Queues: 8 hardware queues per port Traffic classification based on IEEE 802.1p CoS &amp; DSCP Supports WRR and Strict scheduling Rate Limiting (Ingress and Egress, per port base) FE: Resolution 16Kbps ~ 100Mbps GE: Resolution 16Kbps ~ 100Mbps</p>	<h3>Environmental Specifications</h3> <p>Temperature: 0°C to 50°C (Standard Operating) -40°C to 70°C (Non-Operating) Humidity: 10% to 90% (Non-condensing) Vibration: IEC 68-2-36, IEC 68-2-6 Shock: IEC 68-2-29 Drop: IEC 68-2-32</p>
<h3>Security</h3> <p>Supports IEEE 802.1X Port-based and MAC-based* authentication Supports EAPOL transparent* Supports local authentication MAC Filter IP Filter</p>	<h3>Power Supply</h3> <p>AC Power code ■ 100 to 240 V, 50-60 Hz, 0.7A</p> <p>Power Supply ■ Internal, auto-ranging transformer: 100 to 240 VAC, 50 to 60 Hz</p> <p>Power Consumption ■ 30 Watts maximum</p> <p>Maximum Current ■ 0.3A @ 100 VAC ■ 0.12A @ 240 VAC</p>
	<h3>Warranty</h3> <p>Three years warranty</p>

## Ordering Information

### Optional Accessories

ET4201-SX  
ET4201-LX  
ET4201-LHX  
ET4201-ZX  
ECView Pro

### Product Description

1Gbps, Small Form Factor Pluggable (Distance: 500m; Wavelength: 850nm)  
1Gbps, Small Form Factor Pluggable (Distance: 10km; Wavelength: 1310nm)  
1Gbps, Small Form Factor Pluggable (Distance: 40km; Wavelength: 1310nm)  
1Gbps, Small Form Factor Pluggable (Distance: 80km; Wavelength: 1550nm)  
SNMP Network Management Software

\* Feature Release